BPRG calculator – 2-17-2017

Lyndsey

Concrete and wood – realistic value

Even with 100% contamination in the room

When use default values > 5 cm depth of contam, then exceeded EPA risk range

Concentrations – assuming 1.86 Reg Guide

Removable and fixed

Did not zero out inhalation

Density for concrete and ran it. Then ran it for wood entire room most conservative

Composite has all different types of materials, so

1 cm, 5 cm, 15 cm were the only depths allowed in the calculator

Karla – usually had to scabble 1-1.5

Residential scenario

pCi/cm2 – Going from dpm/100 cm2 to pCi/100 cm2

Room size maximum 400X400X40

Average position

We don't have any air sample info. Can use fixed & removable to come up with air, but don't think should do that.

Concrete 2.3 g/cm^3

Also ran composite 2 – concrete floor, sheetrock walls & ceiling, wood doors

For Uranium, the 25 mrem RESRAD was more conservative than Reg Guide 1.86. Navy's assumptions in RES RAD were more conservative

For 5% of the room, just took the concentration and multiplied it by %

BPRG is for liquid spills onto walls, floorings, ceilings, etc.

Karla – Have found contam in all types of parts of the bldg.

Jana – in Bldg 271 & 406 – all fixed, no removable found, so no more airborne

Karla most contam Parcel C Bldg 253, Parcel G 300 series actively used by NRDL for research, went multiple times as the limits changed over time.

Karla 2006 – thought some bldgs would be preserved and re-occupied (e.g. Bldg 253, 123, etc.).

David – Reg Guide 1.86 could be used for bldgs. That are occupied for the future.

Questions

- How deep did you typically need to scabble?
- What were most common building material? Wood most conservative
- Remaining % of surfaces contaminated after remediation, before remediations
- Size room? 10X10X10 is smallest in the PRG